

DATE	INVOICE #	
10/15/2013	4276	

BILL TO

SANDRIDGE ENERGY, INC. ATTN: PURCHASING MANAGER 123 ROBERT S. KERR AVENUE OKLAHOMA CITY, OK 73102 **REMIT TO**

EDGE SERVICES, INC. PO BOX 609 WOODWARD, OK 73802

COUNTY	STARTING D	WORK ORDER	RIG NUMBER	LEASE NAME	Terms
HARPER, KS	10/14/2013	3319	HORIZON 5	ASTORIA 3306 1-34 SWD	Due on rec

Description

DRILLED 60' OF 30" CONDUCTOR HOLE
DRILLED 6' OF 76" HOLE
FURNISHED AND SET 6' X 6' TINHORN CELLAR
FURNISHED 60' OF 20" CONDUCTOR PIPE
FURNISHED 1 LOAD(S) MUD
FURNISHED WELDER AND MATERIALS
FURNISHED 6 YARDS OF GRADE A CEMENT
FURNISHED GROUT PUMP
DRILL MOUSE HOLE

TOTAL BID \$ 15,000.00

Sales Tax (6.15%)

\$93.97

TOTAL

\$15,093.97

Operator Name: Well Name: SANDRIDGE ENERGY INC EBUSINESS

Astoria SWD 3306 12420





Pump Schedule

8 5/8 " Surface

Fluid #	Fluid Type - Name	Surface Density (lb/gal)	Estimated Avg. Rate (bbl/min)	Downhole Volume (bbl)	Water Required (bbl.)
Spacer 1	Fresh Water	8.34	5	10.0	10.0
Lead 1	ALLIED LIGHT WEIGHT CEMENT: TYPE 1 -	12.70	5	73.4	52.6
Tail 1	Tail 1 CLASS A COMMON		5	33.0	19.3
Displacement 1	Displacement	8.33	5	41.9	41.9

 TOTALS
 158.3
 123.8

 Estimated pump time @ 4 bpm
 0.66
 hrs

 Estimated pump time @ 8 bpm
 0.33
 hrs

FI	ni	ds	D	es	ia	n
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8 5/8 " Surface

Fluids Design 8 5/8 '	" Surface		
Spacer 1 Fresh Water	Fluid Density:	8.34 lb/gal	
	Fluid Volume:	10.0 bbls	
Lead 1 ALLIED LIGHT WEIGHT CEMENT: TYPE 1 - CLASS	A		
65:35 Class A:Poz blend, 6% Gel			
2% BWOC Calcium Chloride	Slurry Density:	12.70 lb/gal	
0.25 lb/sk Flo-Seal (Polyflake LCM)	Slurry Yield:	1.87 ft ³ /sk	
	Mixing Water	10.05 gal/sk	
	Total sacks	220 sks	
	Total barrels	73.4 bbls	
Tail 1 CLASS A COMMON			
Tail 1 CLASS A COMMON 100% Class A - Neat			
	Slurry Density:	15.60 lb/gal	
100% Class A - Neat	Slurry Density: Slurry Yield:	15.60 lb/gal 1.20 ft³/sk	
100% Class A - Neat 2% BWOC Calcium Chloride			
100% Class A - Neat 2% BWOC Calcium Chloride	Slurry Yield:	1.20 ft ³ /sk	
100% Class A - Neat 2% BWOC Calcium Chloride	Slurry Yield: Mixing Water	1.20 ft³/sk 5.22 gal/sk	
100% Class A - Neat 2% BWOC Calcium Chloride	Slurry Yield: Mixing Water Total sacks	1.20 ft³/sk 5.22 gal/sk 155 sks	
100% Class A - Neat 2% BWOC Calcium Chloride	Slurry Yield: Mixing Water Total sacks	1.20 ft³/sk 5.22 gal/sk 155 sks	
100% Class A - Neat 2% BWOC Calcium Chloride	Slurry Yield: Mixing Water Total sacks	1.20 ft³/sk 5.22 gal/sk 155 sks	
100% Class A - Neat 2% BWOC Calcium Chloride	Slurry Yield: Mixing Water Total sacks	1.20 ft³/sk 5.22 gal/sk 155 sks	

Operator Name: Well Name: SANDRIDGE ENERGY INC EBUSINESS

Astoria SWD 3306 1-34



October 24, 2013

Pump Schedule

5 1/2 " Production

Fluid #	Fluid Type - Name	Surface Density (lb/gal)	Estimated Avg. Rate (bbl/min)	THE CONTRACTOR STORES	Water Required (bbl.)
Spacer 1	Super Flush	8.50	5	30.0	30.0
Lead 1	Lead 1 ALLIED LIGHT WEIGHT CEMENT: TYPE 1 -		5	188.5	131.3
Tail 1	CLASS A COMMON	14.50	5	36.0	22.0
Displacement 1	Displacement	8.33	5	122.5	122.5

TOTALS 377.0 305.8 Estimated pump time @ 4 bpm 1.57 hrs Estimated pump time @ 8 bpm 0.79 hrs

Fluids Design

5 1/2 " Production

Spacer 1 Super Flush Fluid Density: 8.50 lb/gal Fluid Volume: 30.0 bbls Lead 1 ALLIED LIGHT WEIGHT CEMENT: TYPE 1 - CLASS A 65:35 Class A:Poz blend, 6% Gel 0.4% BWOC Fluid Loss -FL-160 Slurry Density: 12.80 lb/gal 3 lb/sk Gilsonite Slurry Yield: 1.83 ft³/sk Mixing Water 9.51 gal/sk Total sacks 580 sks Total barrels 188.5 bbls Tail 1 CLASS A COMMON 100% Class A - Neat 2% BWOC Premium Gel Slurry Density: 14.50 lb/gal 0.6% BWOC Fluid Loss -FL-160 Slurry Yield: 1.44 ft³/sk 0.1% BWOC Suspension Agent - SA45 Mixing Water 6.60 gal/sk 5 lb/sk Gilsonite Total sacks 140 sks Total barrels 36.0 bbls Displacement 1 Displacement Fluid Density: 8.33 lb/gal Fluid Volume: 122.5 bbls